

State Nursing Surveys and Community Action

By FAYE G. ABDELLAH, R.N., M.A.

During the past 6 years, 35 States and the Territory of Hawaii have used the nursing survey as a tool in analyzing state-wide nursing needs and in alleviating nurse shortages.

Here are some of the major findings revealed by these surveys:

All surveyed States were found to have acute professional nurse shortages and were unable to provide the desirable number of professional nursing hours to patients.

The greatest numerical shortages were found in general hospitals.

The highest need per patient was found in mental and tuberculosis hospitals (see table).

The availability of public health nursing services ranged from none in some communities to adequate coverage in others.

All States revealed that only the very large industrial plant offered nursing services to industrial workers.

Lack of prepared teaching personnel is the most acute problem facing the States. The thin spread of student enrollments throughout the schools suggests an uneconomical use of teaching facilities.

Many students were found to have had no experience in tuberculosis, psychiatric, or public health nursing.

Hospitals, faced with the necessity of providing adequate nursing coverage, have employed many nurses with limited preparation in positions above staff level. Few teaching personnel, public health and industrial nurses were found to have the preparation needed for

their positions. Opportunities to obtain this training were not accessible to nurses who had to carry full-time jobs.

State Surveys Started

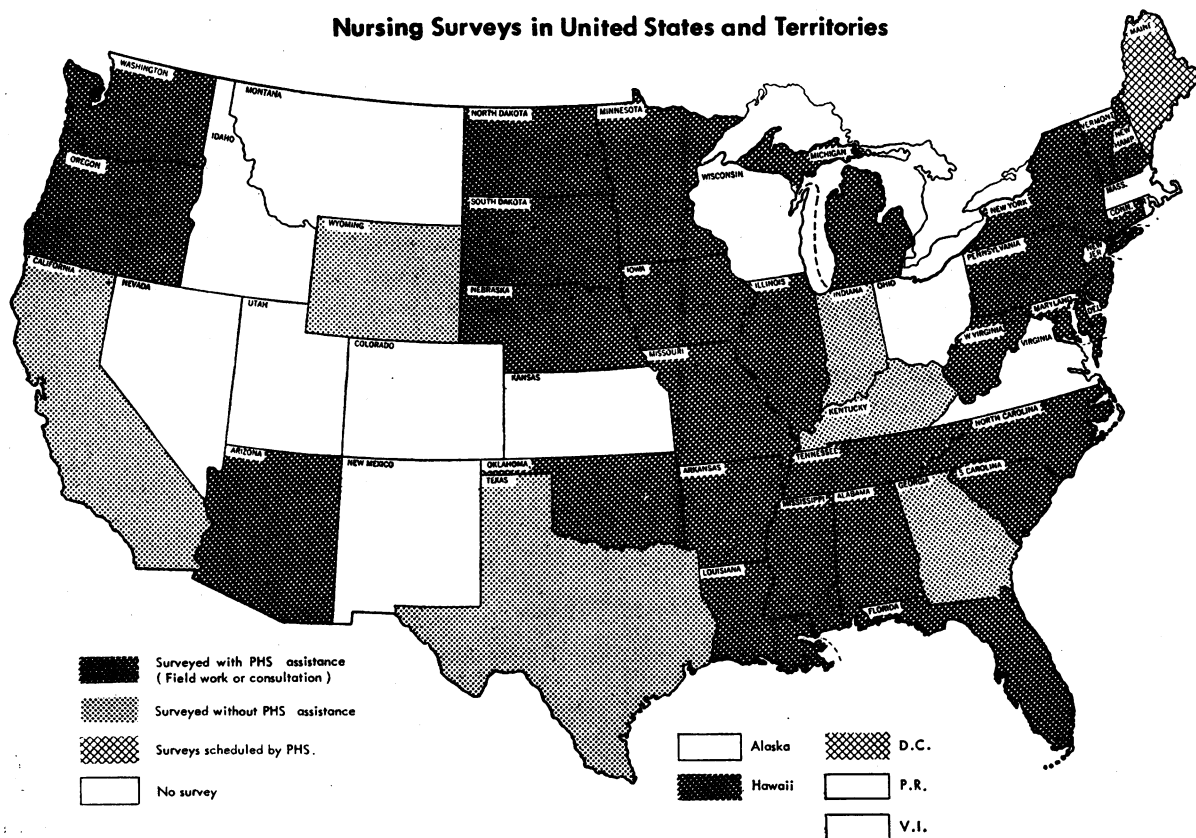
As early as 1946, individual States began to study why the nurse supply has not kept up with the demand and how to meet the nursing needs of the people. Impetus to study state-wide nursing needs was given in 1943 when the National Nursing Council for War Service took the initial step in attacking the problem by appointing a Committee on Domestic Postwar Planning, later to become the National Nursing Planning Committee. It set as its objective the development and distribution of nursing services to the people as well as strengthening nursing education programs (1).

Recognizing the need for these studies, the Public Health Service published a manual in 1949 to guide interested States in conducting nursing surveys (2). The Public Health Service has also directed the field phase of the surveys or provided consultative service in 28 States and in Hawaii. Six other States have conducted nursing surveys without Public Health Service assistance. The accompanying figure identifies these States as well as those where surveys are scheduled.

Only 19 of the States surveyed (with Public Health Service assistance) provided data for analysis. The weaknesses uncovered in these 19 surveys are being attacked by specific programs which have been developed with citizen support following survey recommendations. It was felt that an analysis which would show the steps taken in the surveyed States to find their solutions to nursing problems, as well as addi-

Miss Abdallah is a nurse consultant with the Division of Nursing Resources, Bureau of Medical Services, Public Health Service.

Nursing Surveys in United States and Territories



tional steps which need to be taken in States only recently surveyed, might be useful in planning similar surveys or follow-up evaluations. Therefore, findings, progress activities, and conclusions are based on the 19 comparable surveys.

Organizing a Survey

The organization set up to operate the surveys was planned around State survey committees. Here a common pattern developed where the individual survey committees conducted the actual surveys which were originated by the State nursing groups alone or jointly with legislative or governors' commissions, State universities, or citizen groups. Members of the committees included representatives from both nursing organizations and such nonnursing groups as medical societies, educational associations, labor organizations, industry, and women's clubs.

No one State followed any one organizational pattern throughout the entire series of surveys.

In Louisiana, for example, nursing organizations formed a Joint Committee for the Improvement of Nursing Services to sponsor its survey and appoint committees in conjunction with the State department of health and the State hospital board.

In 15 States, the State health department joined with State nursing organizations in initiating nursing surveys. South Carolina typifies this joint endeavor. There the State department of health not only sponsored the survey in cooperation with the nursing organizations but also provided office space for the survey director and assigned nurse personnel to participate in the survey.

In some few instances a State university or a women's club initiated a survey. Realizing that the scope of the project would require the services of a full-time director experienced in conducting surveys, these groups sought the assistance of the Public Health Service.

A nurse consultant was assigned by the Division of Nursing Resources of the Public Health Service to assist State committees in

conducting each survey by lending it general direction, supervising the collection of data, and participating in the preparation of the survey report. Nurses in the State took the leadership in organizing committees and in deciding what professional standards to use in estimating needs, and then turned from this organizational phase to the collection of information. Before undertaking the field phase of the survey, the State committees agreed, after discus-

sions, on the specific purposes and emphasis of the survey, and distributed the workload. The final recommendations for action came from these participating committees.

Emphasis of Surveys

All surveys had three major purposes:

1. Determine if there are enough nurses available in each field of nursing practice to meet the needs of the State.

Professional nurse needs, supply and deficits, in hospitals, by type, in 18 States and one Territory following similar survey patterns during survey years, 1946-47, 1948, 1949, and 1950

State ¹	Need ²	Supply ³	Deficit	Percent deficit	State ¹	Need ²	Supply ³	Deficit	Percent deficit
<i>1946-47</i>					<i>1949</i>				
Alabama.....	2, 899	1, 383	1, 516	52	Illinois.....	17, 547	9, 748	7, 799	44
General.....	2, 538	1, 362	1, 176	46	General.....	14, 820	(⁴)	(⁴)	(⁴)
Tuberculosis.....	125	11	114	91	Tuberculosis.....	806	(⁴)	(⁴)	(⁴)
Mental.....	236	10	226	96	Mental.....	1, 921	(⁴)	(⁴)	(⁴)
Michigan.....	9, 669	5, 436	4, 233	44	Louisiana.....	3, 598	2, 371	1, 227	34
General.....	7, 914	5, 026	2, 888	36	General.....	3, 051	2, 237	814	27
Tuberculosis.....	1, 031	255	776	75	Tuberculosis.....	229	66	163	71
Mental.....	724	155	569	78	Mental.....	318	68	250	79
Mississippi.....	1, 605	(⁴)	(⁴)	(⁴)	New Jersey.....	8, 098	6, 504	1, 594	20
General.....	1, 288	478	810	66	General.....	6, 224	5, 773	451	7
Tuberculosis.....	122	(⁴)	(⁴)	(⁴)	Tuberculosis.....	900	323	577	64
Mental.....	195	(⁴)	(⁴)	(⁴)	Mental.....	974	408	566	58
<i>1948</i>					North Carolina.....	3, 980	2, 684	1, 296	32
Minnesota.....	6, 935	4, 777	2, 158	31	General.....	(⁴)	(⁴)	(⁴)	(⁴)
General.....	6, 104	4, 428	1, 676	27	Tuberculosis.....	(⁴)	(⁴)	(⁴)	(⁴)
Tuberculosis.....	421	147	274	65	Mental.....	(⁴)	(⁴)	(⁴)	(⁴)
Mental.....	410	202	208	51	South Dakota.....	(⁴)	1, 081	(⁴)	(⁴)
Missouri.....	6, 053	2, 797	3, 256	54	General.....	1, 077	1, 075	2	0
General.....	5, 148	2, 675	2, 473	48	Tuberculosis.....	(⁴)	4	(⁴)	(⁴)
Tuberculosis.....	392	71	321	82	Mental.....	68	2	66	97
Mental.....	513	51	462	90	Washington.....	6, 476	(⁴)	(⁴)	(⁴)
Oregon.....	2, 672	1, 804	868	32	General.....	5, 259	(⁴)	(⁴)	(⁴)
General.....	2, 429	1, 711	718	30	Tuberculosis.....	844	(⁴)	(⁴)	(⁴)
Tuberculosis.....	78	44	34	44	Mental.....	373	34	339	91
Mental.....	165	49	116	70	<i>1950</i>				
South Carolina.....	2, 701	(⁴)	(⁴)	(⁴)	Hawaii.....	1, 068	933	135	13
General.....	2, 540	(⁴)	(⁴)	(⁴)	General.....	801	827	26	3
Tuberculosis.....	17	(⁴)	(⁴)	(⁴)	Tuberculosis.....	139	85	54	39
Mental.....	144	(⁴)	(⁴)	(⁴)	Mental.....	128	21	107	84
Tennessee.....	3, 038	2, 116	922	30	Nebraska.....	2, 423	2, 009	414	17
General.....	2, 660	2, 055	605	23	General.....	2, 198	1, 964	234	11
Tuberculosis.....	88	36	52	59	Tuberculosis.....	40	8	32	80
Mental.....	290	25	265	91	Mental.....	185	37	148	80
<i>1949</i>					Oklahoma.....	2, 507	1, 560	947	38
Arizona.....	1, 238	(⁴)	(⁴)	(⁴)	General.....	2, 056	1, 537	519	35
General.....	1, 047	(⁴)	(⁴)	(⁴)	Tuberculosis.....	129	7	122	94
Tuberculosis.....	58	(⁴)	(⁴)	(⁴)	Mental.....	322	16	306	95
Mental.....	133	11	122	92	West Virginia.....	4, 006	2, 111	1, 895	47
					General.....	3, 523	2, 068	1, 455	41
					Tuberculosis.....	295	24	271	92
					Mental.....	188	19	169	90

¹ The figures for individual States are not additive. ² Needs for nurses are based on standards accepted by the survey committees. These standards vary from State to State so that estimates of needs for the different States are not comparable. ³ Supply data are obtained from State boards of nurse examiner's Registers of Licensed Professional Nurses, from surveys of hospitals, and from surveys of individual nurses. In general hospitals, the supply figures have been adjusted to include the services provided by student nurses. ⁴ Data are missing. ⁵ These figures are excess.

2. Ascertain if the present facilities for nursing education can produce enough well-prepared nurses.

3. Determine if graduate nurses in hospitals, schools of nursing, public health, and industry are trained for the jobs which they are performing.

Other purposes were directed toward finding solutions to such problems in the field of basic professional and graduate nursing education as "Determine if there is a need for establishing a collegiate school of nursing."

Survey Recommendations

Strikingly similar are the recommendations evolving from the surveys. All States including Hawaii stressed the need for additional professional nurses and the need for better prepared professional and nonprofessional nursing personnel. All States stressed broader experience in tuberculosis nursing. Eighteen States wanted more experience in psychiatric nursing for student nurses; 12 stressed centralization of instruction in the basic schools of nursing; 18 stressed the need for workshops, institutes, and extension courses for graduate nurses; and 16 recommended a continuing committee to plan, coordinate, and promote efforts to improve nursing in their States. These were the recommendations which formed the basis for postsurvey study, planning, and action.

In order to promote and carry out the survey recommendations, all of the 19 States formed new committees composed of the original committee members who participated in the surveys. In some cases, new members having special knowledge of the problems requiring solution were included.

Postsurvey Activity

The activity following a nursing survey has varied from State to State. The greatest progress toward achieving survey goals was made in the 13 States where citizens and citizen leaders, in addition to nurses, planned the early stages of the survey and followed through on the postsurvey recommendations. Fifteen States have presented the facts and problems revealed in their surveys to the public, asking for support in finding solutions. Broad com-

munity participation and presentation of the problems to the public have apparently stimulated action following a survey.

Specific progress can be seen in States where problems defined by the survey called for immediate action by nursing groups. For example, in Washington a refresher course has been organized for the 2,700 practical nurses licensed by waiver.

Solutions requiring cooperative action by nursing and other groups take longer to achieve, although achievements of this type have already been recorded. One example is the provision of scholarship assistance for student and graduate nurses by legislatures, and another is the promotion and provision of nursing services for industrial workers in small plants.

Public Health Nurses

The ratio of public health nurses to population is affected by population changes and the total number of public health nurses employed. Twelve of the 19 States not only have increased the number of public health nurses employed but also have increased this number proportionately more than the average for the United States. Four additional States, while increasing the number of public health nurses, have not kept pace with the national rate of increase of public health nurses to population. Three other States have lost public health nurses. In an independent review of State programs by the Public Health Service it is indicated that this loss can be attributed to budget curtailments and to more favorable opportunities opening in other States.

Eleven States, since their nursing surveys, have increased the proportion of public health nurses who had completed one or more years in an approved public health program, and three have surpassed the average relative increase rate for the United States. Three other States show no change since the year of survey.

Five States have a smaller proportion of prepared public health nurses in comparison to the survey year. Three of these States are near or well above the national ratio for 1951 of 35.3 percent of prepared public health nurses. A review of State programs also indicated that some States employ graduates of 3-year schools

on a temporary basis to increase the coverage of public health nurses to population. Many States have increased markedly the total number of public health nurses and are faced with the task of preparing more nurses. When such nurses are given an opportunity to qualify as public health nurses, the total number of prepared public health nurses in these States will increase.

Student Training Widened

Nurses coordinating their efforts with citizen groups have successfully provided broader experience for student nurses in 13 States in the postsurvey periods as shown below:

Affiliation Added			
Total	Rural	Tuberculosis or communicable disease	Psychiatric
Arizona	6	7	9
Illinois	-----	-----	x
Louisiana	-----	x	x
Michigan	x	-----	x
Mississippi	-----	x	x
Minnesota	x	-----	-----
Oklahoma	-----	x	-----
Oregon	x	x	-----
South Carolina	-----	x	x
South Dakota	x	-----	x
Tennessee	x	x	x
Washington	x	-----	-----
West Virginia	-----	x	x

Seven States where students formerly were given limited experience in tuberculosis nursing, or none at all, have since their surveys developed new affiliations in tuberculosis nursing or have provided this experience to a larger number of students. In addition, nine States which provided psychiatric nursing experience in mental hospitals out of State can now offer this experience within their borders and extend it to more students.

South Dakota had such a problem. Its survey recommended broader experience for student nurses in psychiatric nursing. The nurses wanted to set up a State hospital affiliation but could not achieve this until the funds were available. So a joint hospital and State committee of nurses and others was organized. Through the committee's well-coordinated efforts, legislation was passed appropriating \$110,000 for the establishment of an affiliate school of nursing at the Yankton State Hos-

pital. Now, for the first time, student nurses in South Dakota can obtain psychiatric nursing experience within their State.

Six States are providing experience in rural hospital community nursing for the first time where only limited field experience in public health nursing had been offered in the past.

Collegiate Schools of Nursing

Of five States recommending the establishment of a collegiate school of nursing, three have actually established these schools, and two other States are in the process of establishing them. One State recommended deferring the formation of a collegiate school of nursing until a sufficient number of faculty and supervisory personnel have been prepared for participation in such a program.

Legislatures Provide Scholarships

One encouraging step the States have taken to increase their nurse supply and to provide graduate nurses with special training is the appropriation of funds for nursing education. Three of the 19 States—Minnesota, Mississippi, and South Dakota—through their legislatures have provided direct financial aid to professional nursing schools or scholarships for students (3).

In 1948 the Mississippi State Legislature appropriated \$60,000 for a nursing education program at the University of Mississippi and in 1950 appropriated \$115,000. Scholarships amounting to \$85,000 were awarded in 1948 to professional registered nurses who wished to obtain advanced preparation in colleges or universities. This appropriation was later increased to \$96,400. To date, 20 of the recipients of the 32 scholarships awarded have returned to Mississippi and are now in administrative and teaching positions; the other 12 are still enrolled in collegiate or university programs. Part of the State appropriation went to employ a full-time instructor for extension courses in ward management and clinical teaching.

New Opportunities for Graduates

Eleven States offering only limited opportunities for postgraduate education have developed new opportunities for graduate nurses to contribute to better patient care as shown here:

Educational Programs

	<i>Extension courses for credit</i>	<i>Work- shops or institutes</i>
Total.....	10	11
Arizona.....	x	x
Florida.....	x	x
Illinois.....	x	x
Louisiana.....	x	-----
Michigan.....	x	x
Mississippi.....	x	x
New Jersey.....	x	x
Oklahoma.....	x	x
South Carolina.....	x	x
Tennessee.....	-----	x
Washington.....	-----	x
West Virginia.....	x	x

Nine States have set up extension courses for credit and workshops or institutes; one has set up extension courses for credit but without a workshop or institute; and two additional States have set up workshops alone.

West Virginia met the problem of improving its schools of nursing by offering a 2-day workshop in "Curriculum Construction and Revision in Schools of Nursing." West Virginia University, the nursing organizations, and the State Health Department all contributed personnel to conduct the workshop. Sixty nurses, representing 11 of the schools of nursing, hospitals, and public health organizations attended. The enthusiastic response to West Virginia's workshop has spurred the development of other workshops and extension courses for graduate nurses in the State.

Arizona is offering for the first time an accredited course in "Principles in Public Health Nursing" which was instituted following the response of 600 active and inactive nurses to a questionnaire poll. Eighty nurses are now enrolled in two centers.

Programs for Practical Nurses

Following nursing surveys, five States set up eight new programs for practical nurse training in public vocational schools. Illinois, Tennessee, and Oklahoma used their survey data successfully in supporting legislation for licensing practical nurses. Legislation for the practical nurse has been recommended in seven other States.

Areas of Future Progress

Too short a time has elapsed since the surveys were completed to permit a measurement

and an evaluation of changes in the total nurse supply and in the number of nurses graduating, receiving postgraduate preparation, or providing part-time service to industry. Post-survey trends can best be analyzed after the data of the years to come have been accumulated. To increase the total nurse supply, to prepare additional nurses for teaching positions, public health and industrial nursing, and to extend nursing services to industry are the goals ahead which need broad community participation for their achievement.

Increasing the Supply

Specific progress in attaining an adequate nurse supply, both quantitative and qualitative, calls for varied but related activities: stepping up nurse recruitment, improving basic schools of nursing, and overhauling personnel policies. Little progress can be achieved by nurses working alone. The 19 surveys have intensified the necessity for joint effort—by laymen and nurses.

Graduation Trends

A longer period of time is necessary for studying graduation trends. In five States where there has been a lapse of three years since the completion of the surveys, the number of nurse graduations is greater than the United States average. But it must be pointed out that admissions to these schools were made prior to the survey year and cannot be attributed directly to the survey. As student withdrawal rates are reduced by the adoption of more selective and better counseling techniques, and the number of admissions remains constant, it can be expected that the increase in graduations will produce a greater nurse supply.

Key Positions

No information is available on the preparation of hospital nurses for positions above staff level. Only five States have collected data in this area. Before any progress can be analyzed, here too, original data must be collected on a continuing basis, as is done in the public health nursing field.

Part-Time Service in Industry

The surveys revealed that 13 States have limited or no nursing services available for the

small industrial plant with 100 or fewer employees. It has been successfully demonstrated that part-time nursing services can be provided by a visiting nurse association or local health department, or by sharing the services of a nurse in more than one plant (4). This is a long-range goal, for when a nurse's services are provided by a local visiting nurse association or department of health, administrative changes in the organization providing part-time nursing service are usually involved. Other factors to be considered are the development of an informational and educational program focused on a better understanding by management and employers of the contribution nurses can make to industry. Contractual arrangements with industrial plants must be worked out and nurses obtained to staff the projects. This too is an area in which citizens and nurses must work together to achieve a common goal.

Conclusions

With the increased demand for nursing services, States analyzed their nursing programs, carefully measured their needs for nursing personnel, and evaluated their educational programs in terms of future nursing services for their communities.

Hospital and nursing administrators have had to plan the number and kinds of nurses required to sustain professional services and to decide whether they were using their staff nurses most effectively.

When the loss every year of many nurses from the profession is coupled with the low admissions and high withdrawal rates in schools of nursing, an even greater challenge faces the nursing profession in meeting the nursing needs of the States. Now is the time for citizens and nurses to continue organizing groups to make comprehensive long-range plans for meeting the nursing needs of the citizens. A state-wide nursing survey provides a basis

for the preparation of a flexible plan for nursing.

As States progress toward survey goals, each forward step contributes to the national nursing picture. As steps are taken to improve the nursing program of one State, no matter how small the program, the nursing profession will benefit. Better and more nursing service for the families and communities of a State will not only improve its level of health but will also increase its share in national production. Greater progress will become more apparent as citizens with widespread interest continue working with nursing organizations on the immediate problems of recruitment, staffing, education, and training.

Much more study must be made of how nurses can work with other groups on related research, including the collection of original data, and of how they can assist in the development of regional and State planning for nursing.

Progress will be made in direct proportion to the degree of unity and agreement which can be achieved by groups sharing a common interest in nursing. A nursing survey can be a constructive device for getting community action. It provides an opportunity for nurses and community representatives to discuss nursing problems by sharing leadership and responsibility. A state-wide nursing survey can thus become a pattern for a comprehensive nursing plan. The action it generates will achieve better health for all.

REFERENCES

- (1) A comprehensive program for nation-wide action. Editorial. *Am. J. Nursing* 45: 707-713 (1945).
- (2) U. S. Public Health Service: Measuring nursing resources. Washington, D. C., 1949.
- (3) State aid to nursing education. Editorial. *Am. J. Nursing* 51: 691 (1951).
- (4) Whitlock, Olive M.: Nursing service for small plants. *Pub. Health Nursing* 33: 732-734 (1941).